

## Features

1. Coil body of ceramic material.
2. Two solderable metallized terminations of Ag/Pd/Pt.
3. Wound with lacquer-coated copper wire.
4. Wire ends welded onto the terminations.
5. Lead Free (RoHS Compliance)

## Applications

1. RF technique
2. Antenna Amplifiers Tuners, Base Stations or SAT Receivers.

## Ordering Information

<b>5506</b>	<b>270</b>	<b>*</b>	<b>*</b>	<b>**</b>
(1)	(2)	(3)	(4)	(5)

### (1) Series

- 5506 : Size 0603(1608)

### (4) Delivery Form

- 3: coated, bulk
- 4 : coated, tape & reel

### (2) Inductance Value

example:  $27 \times 10^X = 27 \times 10^0 = 27(\text{nH})$

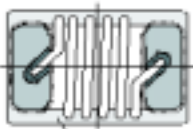
### (5) Packing unit tape & reel

00 : reels  $\Phi 180\text{mm}$ , 4,000 pcs.

### (3) Inductance Tolerance

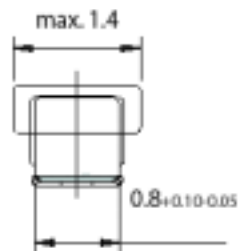
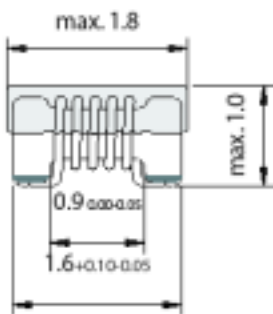
- |                |                       |
|----------------|-----------------------|
| 1 : $\pm 20\%$ | 4 : $\pm 2\%$         |
| 2 : $\pm 10\%$ | 9 : special tolerance |
| 3 : $\pm 5\%$  |                       |

## Shape and Dimensions (mm)



Winding: enameled copper wire,  
Left turned, single layer winding

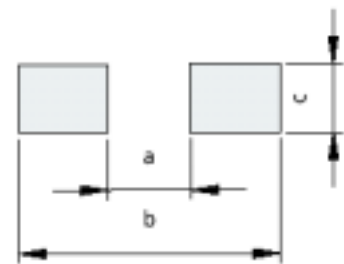
coating material; terminals free of coating material



Dimensions including metallization, winding and coating

- Metallization
- Coating
- Welding Area

### Pad Layout Recommendation



a	b	c
0,8 ~ 1,0	2,0 ~ 2,5	0,7 ~ 0,9

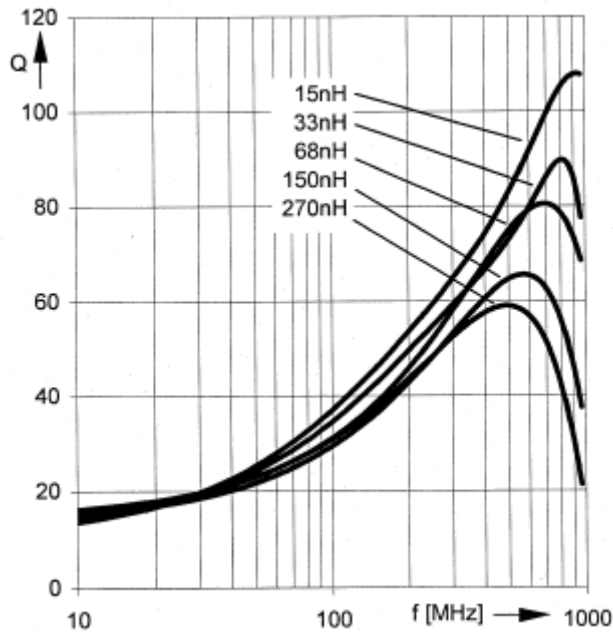
## Electrical Parameters

Order No.	L [nH]	Q <sub>min</sub>	Q <sub>typ</sub> @800MHz	f <sub>L,Q</sub> [MHz]	f <sub>res,min</sub> [MHz]	D.C.R.,max [mΩ]	I <sub>N,max</sub> [mA]	Tol. [%]
5506 015 ***	1,5	22	45	250	6000	25	1000	10/20
5506 018 ***	1,8	22	35	250	6000	35	900	10/20
5506 033 ***	3,3	30	55	250	6000	40	800	10/20
5506 036 ***	3,6	35	50	250	6000	35	900	10/20
5506 039 ***	3,9	35	50	250	6000	35	900	10/20
5506 047 ***	4,7	28	45	250	6000	75	620	10/20
5506 056 ***	5,6	35	60	250	6000	40	840	5/10/20
5506 068 ***	6,8	40	70	250	5600	35	890	5/10/20
5506 082 ***	8,2	40	55	250	5500	60	700	5/10/20
5506 087 ***	8,7	35	70	250	5300	60	700	5/10/20
5506 100 ***	10	45	80	250	5000	45	780	2/5/10
5506 120 ***	12	40	70	250	4100	90	560	2/5/10
5506 150 ***	15	45	80	250	3300	55	710	2/5/10
5506 180 ***	18	45	75	250	3700	90	560	2/5/10
5506 220 ***	22	45	70	250	3100	135	450	2/5/10
5506 270 ***	27	45	70	250	2900	115	500	2/5/10
5506 330 ***	33	45	70	250	2550	115	490	2/5/10
5506 390 ***	39	45	65	250	2150	120	480	2/5/10
5506 470 ***	47	40	55	200	2050	200	380	2/5/10
5506 560 ***	56	40	50	200	2000	290	310	2/5/10
5506 680 ***	68	40	50	200	1700	360	280	2/5/10
5506 820 ***	82	35	60	150	1700	590	220	2/5/10
5506 101 ***	100	35	50	150	1550	890	180	2/5/10
5506 121 ***	120	35	50	150	1300	1100	160	2/5/10
5506 151 ***	150	30	40	100	1200	1200	150	2/5/10
5506 181 ***	180	30	35	100	1150	1300	140	2/5/10
5506 221 ***	220	30	30	100	1050	1900	120	2/5/10
5506 271 ***	270	30	-	100	990	2100	115	2/5/10
5506 331 ***	330	30	-	100	890	2900	95	2/5/10
5506 391 ***	390	30	-	100	810	4000	80	2/5/10

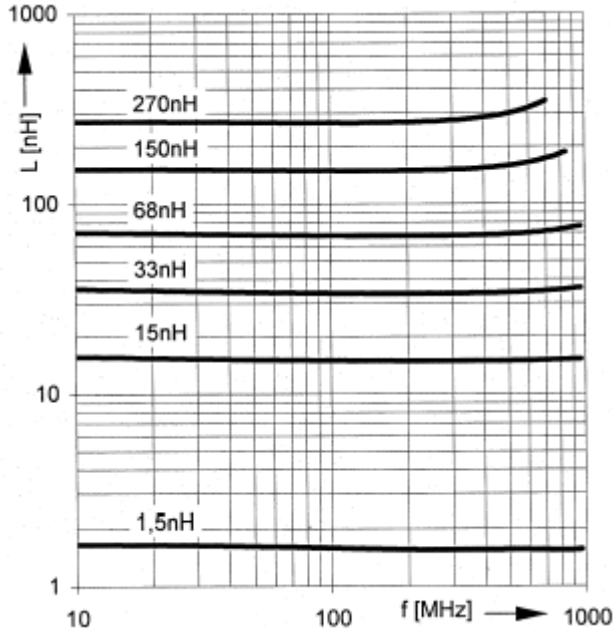
All values on ceramic core.

## Electrical Characteristic Curves

Typical Q factor vs. frequency



Typical Inductance vs. frequency



Climatic category acc. to DIN IEC 68-1:55/125/56

Test equipment : Inductance and Q: Agilent 42286A+16193A.

Resonant Frequency : Agilent 8753E.

D.C.R. : Burst Resistomat 2329.(at20°C)